

Notice of Allowability

Application No.

10/799,734

Examiner

Henry S. Hu

Applicant(s)

ASAKAWA ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief of August 10, 2006.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This Office Action is in response to **Appeal Brief** filed on August 10, 2006. **Claims 1-16 are now pending** with only one independent claim (Claim 1). An action follows.
2. Claim rejections under **Final** Office Action filed on May 17, 2006 are now removed for the reasons given in paragraphs 3-11 thereafter.

Allowable Subject Matter

3. Claims 1-16 are allowed.
4. The following is an examiner's statement of reasons for allowance: The above Claims 1-16 are allowed over the closest references:
5. *The limitation of parent **Claim 1** in present invention relates to a fluororesin powder coating composition characterized by comprising: (A) a non-vinylidene fluororesin having a Tg higher than 40 °C and (B) a resin having a Tg of from 0 to 40 °C, wherein the resin having a Tg of from 0 to 40 °C has crosslinkable reactive groups.*

See other limitations of dependent Claim 2-16.

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6. Applicants have now claimed in once-amended parent **Claim 1** an unexpected way of obtaining as a fluororesin powder coating composition. It comprises two major components as: (A) **a non-vinylidene fluororesin** having a Tg higher than 40 °C, and (B) **a resin** having a Tg of from 0 to 40 °C and having crosslinkable reactive groups.

After a very close examination on the arguments of pages **3-4** from Appeal Brief filed on August 10, 2006, the sole rely on Uemae, Adachi and Labana references in combination or alone to teach the second resin in (B) component cannot stand as following:

7. Firstly, even **Uemae reference may have disclosed using some resins** as the (B) component to be useful as “film smoothness improver” or as “charge control agent” and **some crosslinkable groups** such as carboxylic acid or chlorine atom “may” be existed, Uemae does NOT mention any Tg of 0 to 40 °C at all. For instance, see column 9, line 67 for “chlorinated” polyester, and “acid group excessive” polyester; see column 10, line 11-17 for carboxylic acid-containing polymers such as ethylene/“methacrylic acid” copolymer and a “maleic acid”/phenol resin. With respect to the use of fluororesin as (A) component, Uemae only discloses that such a fluororesin has **a Tg at 0-100 °C** (column 5, line 23-24), which is somewhat different from the claimed Tg higher than 40 °C. Additionally, Just saying “” is not specific enough.

8. Secondly, **Adachi** reference does not disclose any crosslinkable reactive group on his water-dispersible resin (which has a Tg less than 40 °C (see column 6, line 51-61). As exactly pointed out by the Applicants in the interview summary of 3-29-2006, only non-functional

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group-containing monomers, such as (A) the alkyl esters of acrylic acid or methacrylic acid, (B) styrene and (C) the like, are indeed used by Adachi in this regard. Just saying "at least some of them have a Tg temperature falling within the claimed range of 0-40 °C" is not specific enough.

Thirdly, **Labana** reference only uses a **copolymer of glycidyl methacrylate having a Tg of 40-90 °C** as component (A); he is thereby silent about "at least" using a fluorinated analogue polymer. Even the use of Uemae or Adachi can teach the use of fluororesin component (A). However, the problem in resin component (B) is still existed.

9. Additionally, the present invention has shown unexpected results in examples along with some comparative examples for making such a blend composition (see pages 14-23 for **examples 1-4, comparative examples 1-4** along with Tables 1-3). Therefore, all the above-mentioned references, in combination or alone, does not teach or fairly suggest the limitations of present invention.

10. After further examination and search, the examiner found the following prior art did not teach the claimed limitation:

US Patent No. 5,147,934 (or its equivalent EP 301,557) to Ito et al. only discloses the preparation of a thermosetting powdery coating composition comprising a functional group-containing fluororesin having a Tg temperature of 30-120 °C with some curing agent (abstract, line 1-15; column 2, line 34-58). **Although some additives can be added (column 8,**

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line 37-55), the additional use of resin having the claimed Tg temperature of 0-40 °C and also having some crosslinkable groups is NOT disclosed or suggested. Therefore, Ito fails to teach or fairly suggest making the powder coating composition of present invention.

11. The key issue on the using the second resin having a Tg of 0 to 40°C and having crosslinkable reactive groups so as to be with the first fluoro-resin having a Tg higher than 40°C, cannot be overcome by any or the combination of the above references, therefore, the present invention is novel.

12. As of the date of this office action, the examiner has not located or identified any reference that can be used singularly or in combination with another reference including the above references to render the present invention anticipated or obvious to one of the ordinary skill in the art. Therefore, the independent and parent composition **Claim 1** is allowed for the reason listed above. Since the prior art of record fails to teach the present invention, the remaining pending dependent **Claims 2-16** are passed to issue.

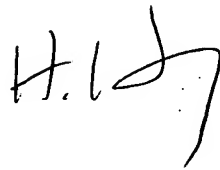
13. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Dr. Henry S. Hu** whose telephone number is (571) 272-1103. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The fax number for the organization

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where this application or proceeding is assigned is (571) 273-8300 for all regular communications.

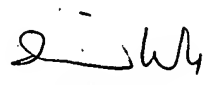
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry S. Hu

Patent Examiner, art unit 1713, USPTO

September 26, 2006



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